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## Electrochemical and enzymatic synthesis of oxidative drug metabolites for metabolism studies

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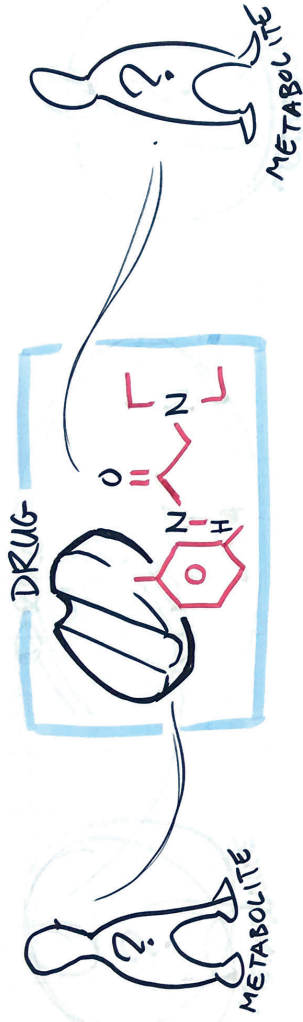
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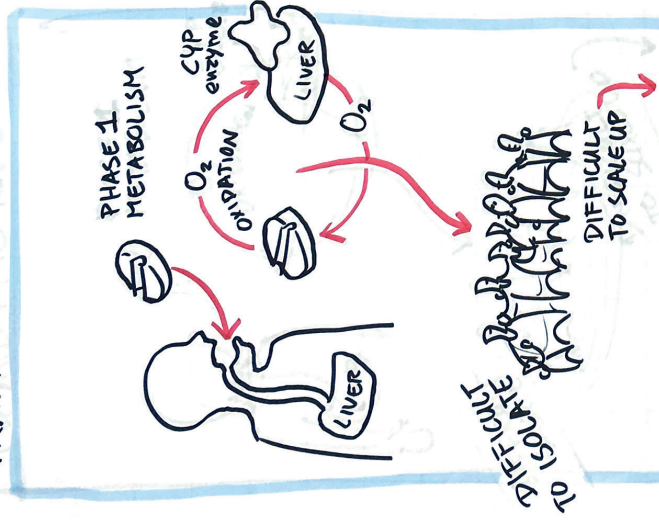
## List of Presentations

1. **T. Gul**, H.P. Permentier, R. Bischoff, Method development for electrochemical synthesis of oxidative drug metabolites, ElCheMS-2<sup>nd</sup> International Workshop on EC-MS, 23-24 May 2013, Münster, Germany (poster)
2. **T. Gul**, H.P. Permentier, R. Bischoff, Optimization of reaction parameters for electrochemical oxidation of drug compounds with the Design of Experiments technique, Annual Meeting of the NWO/CW study group Analytical Chemistry and COAST, 20-21 November 2013, Lunteren, The Netherlands (poster)
3. **T. Gul**, H.P. Permentier, R. Bischoff, Electrochemical synthesis of oxidative drug metabolites, Annual Pharmacy Day, 12 June 2014, Groningen, The Netherlands (oral presentation)
4. **T. Gul**, H.P. Permentier, R. Bischoff, Optimization of reaction parameters for the electrochemical oxidation of lidocaine with a Design of Experiments approach, ElCheMS-3<sup>rd</sup> International Workshop on EC-MS, 28-29 May 2015, Münster, Germany (oral presentation)
5. M. Ruokolainen, **T. Gul**, H.P. Permentier, T. Sikanen, R. Kostianen, T. Kotiaho, Comparison of titanium dioxide photocatalysis, electrochemical reactions and electrochemically assisted fenton reaction for simulation of phase I metabolism reactions. Farmasian Päivät, 13-15 November 2015, Helsinki, Finland (poster)
6. **T. Gul**, EC-MS for Drug Metabolism: Electrochemical synthesis of oxidative drug metabolites, Medicinal Chemistry & Bioanalysis (MCB) Seminars, 17 December 2015, Groningen, The Netherlands (oral presentation)
7. **T. Gul**, M. Krzek, H. Permentier, M. Fraaije, R. Bischoff, Microbial flavoprotein monooxygenases for the enantioselective preparation of drug metabolites, 3<sup>rd</sup> NVMS-BSMS Conference on Mass Spectrometry, 17-19 April 2016, Kerkrade, The Netherlands (poster)
8. **T. Gul**, M. Krzek, H. Permentier, M. Fraaije, R. Bischoff, Microbial flavoprotein monooxygenases for the enantioselective preparation of drug metabolites, 44<sup>th</sup> International Symposium on HPLC, 19-24 June 2016, San Francisco, USA (poster)
9. **T. Gul**, R. Bischoff, H.P. Permentier, Synthesis of Aromatic Hydroxylation Metabolites of Lidocaine by Using a Pt-oxide surface, 67<sup>th</sup> Annual Meeting of the International Society of Electrochemistry, 21-26 August 2016, The Hague, The Netherlands (poster)

# MEASURING TOXICITY OF METABOLITES



## TRADITIONAL METHOD



## EC-MS METHOD

